

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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**Sheet** 

Application Number	10/584981
Filing Date	Dec. 31, 2004
First Named Inventor	Keyvan Behnam
Art Unit	1651
Examiner Name	Ford, Allison
Attorney Docket Number	187124/US/3

## **U.S. PUBLICATION DOCUMENTS**

*Examiner Initials	Cite No.	DOCUMENT NUMBER Number – Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Wher Relevant Passages or Relevant Figures Appear
		US 2002/0058947	05-16-2002	Hochschuler et al.	
		US 2002/0068974	06-02-2002	Kuslich et al.	
		US 2002/0077701	06-20-2002	Kuslich	
		US- 2002/0197297	12-26-2002	Risbud et al.	
		US- 2003/0044445	03-06-2003	Kay et al.	
		US- 2003/0065392	04-03-2003	Fan et al.	
•		US 2003/0143258	07-31-2003	Knaack et al.	
		US 2003/0152548	08-14-2003	Mikos et al.	
		US 2004/0220615	11-04-2004	Lin	
		US 2005/0020506	01-27-2005	Drapeau et al.	
		US 2005/0037978	02-2005	Damien, Christopher J.	
		US 2005/0131417	06-16-2005	Ahern et al.	
		US 2005/0244450	11-03-2005	Reddi	
·		US 2005/0244457	11-03-2005	Reddi	
		US 2005/0251267	11-10-2005	Winterbottom et al.	
		US 2006/0216323	09-28-2006	Knaack et al.	
		US 2006/0287732	12-21-2006	Pezeshkian	
		US 2007/0073401	03-29-2007	Pointillart et al.	
		US 2007/0098756	05-03-2007	Behnam	
		US 2007/0110820	05-17-2007	Behnam	
		US 2007/0231788	10-04-2007	Behnam et al.	
		US 2008/0027546	01-31-2008	Semler et al.	
		US 2009/0087471	04-02-2009	Shimp et al.	
		US 2009/0130173	05-21-2009	Behnam et al.	*

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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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				U	.S. PUBLI	CATIO	N DOCUMENTS			
*Examiner	Cite No.		JMENT N	IUMBER de (if known)	Publication MM-DD-Y		Name of Patent Applicant of Cited D		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US 20	09/015	5378	06-18-2009	)	Behnam et al.		-	
		US 20	09/015	7087	06-18-2009	)	Wei et al.			
		US 20	09/019	2474	06-30-2009	•	Wei et al.			
		US 20	09/022	0605	09-03-2009	)	Wei et al.			
					U.S. PA	TENT [	DOCUMENTS			
*Examiner Initials	Cite No.	DOCUMENT NUMBER  Number – Kind Code (if known)			Issue Date MM-DD-YYYY		Name of Patentee or Applicant of Cited Document		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		US 4,	172,12	В	10-23-1979	•	Thiele et al.			
		US 4,	US 4,294,753		10-13-198	1	Urist			
		US 4,	430,76	0	02-14-1984		Smestad			
		US- 4,	455,25	6	06-19-1984	4	Urist			
		us <sup>4,</sup>	472,84	0	09-25-1984	4	Jefferies			
		US 4,	563,35	0	01-07-1986	5	Nathan et al.			
		US- 4,	619,98	9	10-28-1980	6	Urist			
		us 4,	657,54	8	04-14-1987		Nichols			
			755,18		07-05-1988		Silverberg			
			761,47		08-02-1988		Urist			
			774,22		09-27-1988		Seyedin et al.			
			774,32		09-27-198		Seyedin et al.			
			787,90		11-29-1988		Haris			
			789,73		12-06-198		Urist			
			795,80		01-03-1989		Urist			
	<u> </u>	us <sup>4,</sup>	804,74	4	02-14-1989	9	Arup			
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<u> </u>		US 4,	810,69°	1	03-07-1989	9	Seyedin et al.			
		US- 4,	843,06	3	06-27-198	9	Seyedin et al.			
		US 4,	902,29	6	02-20-1990	)	Bolander et al.			
		US- <sup>5,</sup>	041,13	8	08-20-199	1	Vacanti et al.	100 00 00		
		US- 5,106,748 US 5,166,187 US- 5,266,683 US- 5,270,300		04-21-199	1	Wozney et al.				
				11-24-1992	2	Collombel et al.				
				11-30-1993 12-14-1993		Oppermann et al.				
						Hunziker				
		US 5,290,558		03-01-1994	4	O'Leary et al.				
		US- 5,	290,76	3	03-01-1994		Poser et al.			
		US- 5,	336,26	4	08-09-199	4	Constanz et al.			
		US <sup>5,</sup>	385,88	7	01-31-199	5	Yim et al.			
		US 5,	405,39	0	04-11-199	5	O'Leary et al.			
		US <sup>5,</sup>	501,70	6	03-26-199	6	Arenberg			
		US <sup>5,</sup>	531,73	5	07-02-199	6	Thompson			
		US- <sup>5,</sup>	563,12	4	10-08-199	6	Damien et al.			
			571,189		11-05-199		Kuslich			
		-	618,33		04-08-199		Ito			
		00	658,88		08-19-199		Celeste et al.			
		00	723,01		03-03-198		Fages et al.			
		00	725,57		03-10-199		Fages et al.			
			776,19: 		07-07-199		Kwan et al.			
		-	788,95		08-04-199		Singh			
		us <sup>5,</sup>	830,49	3	11-03-199	B	Yokota et al			
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*Examiner Initials	Cite No.	•	OCUMENT N er – Kind Co	IUMBER de (if known)	Issue Da	ate	Name of Patent Applicant of Cited D		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US	5,846,48	4	12-08-1998	3	Scarborough et al.		
		US	5,877,00	5	03-02-1999	)	Castor et al.		
		US	5,894,07	0	04-13-1999	)	Hansson et al.		
		US	6,007,58		12-28-1999		Lehto et al.		
		US 6,018,095		01-25-2000		Lerch et al.			
		US 6,030,635		02-29-2000		Gertzman et al.			
		us	6,120,55		09-19-2000		Poddevin et al.		
		US	6,124,27	3	09-26-2000		Drohan et al.		
		US	6,149,86		11-21-2000		Dillow et al.		
		US	6,162,25		12-19-2000		Scarborough et al.		
		US	6,180,60		01-30-2001		Chen et al.		
		US	6,197,32		03-06-2001		MacPhee et al.		
	ļ	US	6,217,61		04-17-2001		Fages et al.		
		US	6,245,53		06-12-2001		Williams et al.		
	ļ ,	US	6,294,04		09-25-2001		Boyce et al.		
	<u> </u>	US	6,311,69		11-06-2001		Jefferies	<del></del>	
	<u> </u>	US	6,387,39		05-14-2002	_	Shikinami et al.		
	<u> </u>	US	6,372,25		04-16-2002		Marchosky		
	ļ	US-	6,436,13		08-20-2002		Dowd et al.		
	<u> </u>	US	6,440,44		08-27-2002		Boyce et al.		
	<u> </u>	US	6,465,16		10-15-2002		Castor et al.		
	_	US	6,478,82		11-12-2002		Winterbottom et al		
	<u> </u>	US	6,592,88		07-15-2003		Zimmermann		
	١.	US	6,595,99	<b>8</b>	07-22-2003	3 	Johnson et al.		
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*Examiner	Cite No.		JMENT N		Issue Da	ate	Name of Patent Applicant of Cited D		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number – Kind Code (if known) US 6,599,515		07-29-2003		Delmotte		relevant rigures Appear		
			616,698	3	09-09-2003	3	Scarborough			
			618,698	3	09-09-2003	3	Beausoleil et al.			
		US 6,	623,749	9	09-23-2003	3	Williams et al.			
		US 6,	648,919	9	11-18-2003	3	Ferree			
		US 6,740,093		05-25-2004	ļ	Hochschuler et al.				
		US 6,	03 / **/		08-31-2004	Į.	Zucherman			
		US 6,843,807		01-18-2005		Boyce et al.				
	1	US <sup>6,</sup>	US 6,884,428		04-26-2005	5	Binette et al.			
		US 6,	884,778	3	04-26-2005	5	Jo et al.			
			911,212		06-28-2005	j	Gertzman et al.	,		
			953,594		10-11-2005		Lee et al.			
		00	969,404		11-20-2005		Ferree			
		00	989,029		01-24-2006		Bonutti	,		
		00	001,390		02-21-2006		Gebhardt et al.			
		-	008,591		03-07-2006	6	Kafesjian et al.			
			019,192		03-28-2006		Gertzman et al			
			025,771		04-11-2006		Kuslich et al.			
			045,141	•	05-16-2006		Merboth et al.			
	•		060,287		06-13-2006		Hubbard et al.			
			108,832		09-19-2006		Christensen et al.			
			179,299		02-20-2007		Edwards et al.			
			208,015		04-24-2007		Pointillart et al.			
		us <sup>7</sup> ,	220,282	2	05-22-2007		Kuslich			
EXAMIN	IER	SIGNATUF	₹E				DATE CONSIDERED			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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*Examiner Initials	Cite No.		JMENT N	IUMBER de (if known)	Issue D MM-DD-Y		Name of Patent Applicant of Cited D		Pages, Columns Relevant Pa Relevant Figu	issages	or
		us <sup>7</sup> ,	226,48	1	06-05-2007	7	Kuslich				
		us <sup>7</sup> ,	7,241,303 07-10-2007			7	Reiss et al.				
		us <sup>7,</sup>	261,720	)	08-28-2007	7	Stevens et al.				
		us R	S RE 38,522 05-25-2004				Gertzman et al.				
				F	OREIGN F	PATE	NT DOCUMENTS		<u> </u>		
		FOREIGN PATENT DOCUMENT  Country Number - Kind Code (if					. '		Pages, Columns, Lines, Where Relevant	TRANSL	ATION
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		DE.	693 24	4 117 T2	06-29-19	994	Jacques Fages et al.				
		EP	0 082	621	06-29-19	983 (	Collagen Corp.				
		EP.	0 148	155	04-19-19		nternational Genetic Engineering, Inc.				
		EP	0 212	474	03-04-19	987 l	Jniversity of Californ	ia			
		EP	0 309	241	03-29-19	989 (	Collagen Corp.				
		EP	0 603	920 A1	06-29-19	994 E	Bioland				
		wo	1988/0	000205	01-14-19	988	Genetics Institute, Inc	<b>&gt;</b> .			
		wo	1988/0	001517	03-10-19	886	Materials Consultants	3			
		wo	1990/0	003733	04-19-19		nternational Genetic Engineering, Inc.				
		wo	1995/0	31948	11-30-19	95 H	Kuslich				
		wo	1996/0	39170	12-12-19	96 (	Genetics Institute, Inc	<b>.</b>			
		WO	2000/0	13615	03-16-20	)00 L	_anka Limited				
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				MM-DD-Y					YES	NO I		
		wo			08-17-20		Osteogenetics, GmbH					
		WO.	O 2004/073563 A 09-02-20		004	Depuy Spine Inc. et a	l <b>.</b>					
•		WO.	O 2006/076712 07-20-20		006	Osteotech, Inc.						
		wo	2007/0	53850	05-10-20	007 Osteotech, Inc.						
		WO	2007/1	133451	11-22-20	007	Osiris Therapeutics, I	nc.				
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				al., "Monkey Bo s," <i>J. of Orthop</i>			ces Bone Formation in the (1991).	ne Athymic F	Rat, but Not in			
		Aspent	perg P.	et al., "Bone m	orphogen	etic pr	otein induces bone in th	e squirrel me	onkey, but			
	ļ	Blumer	natrix do nthal et	oes not", <i>Acta</i> ( al. "The use o	<i>onnop Sc</i> f collagen	meml	3(6): 619-22 (Decembe brane barriers in conjunc	r 1992). ction with co	mbined			
		demine	eralized	bone-collagen			human infrabony defect					
	<u> </u>		7 (June ler et al.		Demineral	ized B	one Matrix in the Repai	r of Segment	tal Defects",			
	ļ		The Journal of Bone and Joint Surgery, 68-A (8): 1264-1273.  Bravo, D.A. et al., "Accurate and Efficient Cleavage of the Human Insulin Proreceptor by the									
		Humar	Human Proprotein-Processing Protease Furin," Journal Biol Chem. 269: 25830-25873									
		(1994). Camer	on, A. e	et al., "Polvargir	nines are	potent	inhibitors," J. Biol. Chei	m. 275: 367	41-36749			
	_	(2000)	•			•						
							gen Synthesis by Autolo 021-1023 (1980).	gous Growti	i raciof in			
EXAMI	NER	SIGNATUR	RE				DATE CONSIDERED					

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	<u> </u>				, "Effect of allogenic free	eze-dried	demineralized bone		120				
				ntino, e				stic Surgery 18(1): pp. 14-					
			Deathe	rage et	al., "Packaging and Del			s in a Collagenous					
			Elliott,	Implant," Collagen Rel. Res. 7:225-231 (1987).  Elliott, J.C., "Structure and Chemistry of the Apatites and Other Calcium Orthophosphates", Elsevier Science B.V., Amsterdam (1994).									
					H., "Principles of Bone		ling: An Account of P	Post-natal Growth and					
			remodeling Processes in Long Bones and the Mandible," Charles C. Thomas, Springfield, Ill., (1963).										
			Farley et al., "Human Skeletal Growth Factor: Characterization of the Mitogenic Effect on Bone Cells in Vitro," <i>Biochem</i> , 21:3508-3513 (1982).										
					. "Long-Term Maintenai			er Implantation of					
i			Autolyz	ed, An	tigen-Extracted, Allogen 9(1): 47-53 (Jan. 1998).	ic Bone ir							
					. "Histological evaluation								
					f mineralized and demin medical Materials Resea					-			
			Gamra	dt, et al				no. and Related Research,					
		-	Gepste a Powd	in et al. ler," <i>Tl</i>	. "Bridging Large Defect the Journal of Bone and J	Joint Surg	gery, 69A(7): 984-99	one Matrix in the Form of 1 (1987).					
			Glowac 324: 47	ki, "Ce	Ilular Reactions to Bone	e-Derived	Material," Clin. Ortho	o. and Related Research,					
			Han, C.	et al.	"Autolysed Antigen-Extrobits," Yonsei Medical Jo			pair of Diaphyseal Boen		_			
			Hollinge	er, et a	<ul><li>I. "A comparison of four</li><li>7: 255-263 (June 1991).</li></ul>	r particula	te bone derivatives,"	Clin. Ortho. and Related					
			Hunzike	er et al.		kness De		rtilage: Cell Recruitment 733 (1996).					
			Iwata e Gelatin	t al. "C for Re	hemosterilized Autolyze	ed Antige	n-Extracted Allogenei						
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_			Janovec, et al. "Autolyzed Antigen-Ext Diaphyseal Bone Defects in Rabbits,"							
		Applica	tion as	pha 1-Antitrypsin Portlar an antipathogenic agent	", Proc	. Natl. Acad. Sci., USA	95: 7293-7298 (1998).			
				"Human Bone Mortphog nion," <i>Clin. Ortho. and R</i>						
	ļ			"Preliminary exploration:						
		(BMP),	antigen-extracted allogeneic (AAA) bo (BMP)," Bone Grafts, Derivatives and Oxford, pp. 363-376 (1994).						,	
				"Resistant Nonunions ar						
				Ortho. and Related Rese Treatment of Jaw Defect						
		and Ma	xillofac	ial Surgery, pp. 623-626	(June	6, 1989).				
		Deficier	nt Hydro	Comparison of Human E oxyapatite, Betatricalciur 24(15):2593-603 (2003).					ı	
		Krysan,	D.J., e	et al., "Quantitative Chara 3-23234 (1999).	acteriza	ation of Furin Specificity	r", Journal Biol. Chem.			
				Osteoinductive, morpholo						
				ted, allogeneic human bo Repair of human skull det						
	ļ	Cranio	Maxillo	fac. Surg. 23: 337-346 (1	1995).				<del></del>	
				et al., "Flexural Rigidity el. Res., 317: 254-262 (1		ially Demineralized Dia	physeal Bone Grafts",		ı	
		Effects (1997).	of Lase	er Perforation and Partial	tial Demineralization" J. Orthop. Res. Vol., 15(5): 748-756					
		a new r	nethod	et al. "Kinetics of cortica for modifying cortical bo 31: 365-372 (1996).			rolled demineralization – nedical Materials			
				et al. "Mechanical Prope Ortho. and Related Resea			lly Demineralized Bone			
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				et al., "An Electron Micro e," Calcified Tissue Int. (	oscopic Study on the Process 61:294-297 (1997).	of Acid Demineralization		
		Liebern	nan, et a	al. "Treatment of Osteon	ecrosis of the Femoral Head			
		(2004).		, ,	ein," Clin. Ortho. and Related			
		Melloni		es. "Bone Allografts in P : 116-125 (1996).	eriodontal Therapy," Clin. Or	tho. and Related		
		Melloni	g, "Dec	alcified freeze-dried bon	e allograft as an implant mate			
			•	747	tics and Restorative Dentistry			
		Miloslav et al., "Autolyzed antigen-extracted allogeneic bone for bridging segmented diaphyseal bone defects in rabbits," <i>Clinical Orthopaedics and Related Research</i> , 229: 249-256 (April 1988).						
		Nade et al. "Decalcified Bone as a Substrate for Osteogenesis," Bone Joint Surg. 59(2): 189-1996 (1977).						
		Nogami et al., "Sustrata Prepared from The Journal of Cell Biology, 62: 510-51				esis in Tissue Culture",		
		Nogam	i et al.,		Matrix Gelatin -Induced Differ	entiation of Bone", Calcif.		
		Oberg 6	et al. "E	Bone formation after imp	lantation of autolysed antigen Maxillofac. Surg. 32: 628-632			
		Oberg 6	et al. "B	one healing after implan	tation of hydroxyapatite grant extracted allogeneic bone an	les and blocks (Interpore		
		Maxillo	fac. Sui	rg. 23: 110-114 (1994).				
		"Organ	ic Reac	tions", vols. 1-40, John \	Wiley and Sons, New York, N	Y (1991).		
		Bone,"	Ann. P	Plast. Surg. 15(5): 367-37				
		Peel SA	A et al.,	"In search of the ideal b	one morphogenetic protein de			
		studies on demineralized bone matrix, purified, and recombinant bone morphogenetic protein", J. Craniofac. Surg., 14(3): 284-91 (May 2003).						
	1				in the Transformation of Norr			
		Ripamo	onti et a	I. "Bone induction in a corg. 47: 963-969 (1989).	omposite allogeneic bone/allo	plastic implant," J. <i>Oral</i>		
EXAMINER	R SI				DATE CONSIDERED			
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			Ripamonti et al. "The induction of bone in osteogenic composites of bone matrix and hydroxyapatite replicas: Experimental study on the baboon," <i>Oral Maxillofac. Surg.</i> 9 (1991).					
		Ripam	onti. "B	one induction in nonhum nd Related Research, 269	nan primates: an experimental 9: 284-294 (Aug. 1991).	I study on the baboon,"		
					primates with autolyzed antige			
		Rodd,	bone," Clin. Ortho. and Related Research, 282: 293-303 (Sept. 1992).  Rodd, "Chemistry of Carbon Compounds", vols. 1-5 and supplementals, Elsevier Science					
				nsterdan (1989). al. "Bone formation enha	anced by induction," Acta Orth	nop Scan 56: 67-71 (1985).	-	
					oted by bone matrix combined	with marrow," Acta		
	$\vdash$			5Z: 15-18 (1986). al. "Effects of bone grafti	ing on maxillary bone healing	in the arowing pig," J.		
	<u> </u>	Oral M	laxillofac	c. Surg. 40: 566-569 (198	82).			
		lesions	s," Clin.	Ortho. and Related Rese				
		Sailer	et al. "A	Application of purified bor	ne morphogenetic protein (BN al Surgery 22: 2-11 (1994).	1P) in cranio-maxillo-facial		
		Sambr	rook, et		Laboratory Manual, 3 <sup>rd</sup> ed., 0	Cold Spring Harbor		
		Sampa	ath and I	Reddi, "Homology of bon	ne-inductive proteins from hun ad. Sci. 80:6591-6594 (1983).			
		Sampa	ath et al.	., "Bovine osteogenic pro	otein is composed of dimmers	of OP-1 and BMP-2A,		
		pp. 13 <sup>4</sup>	198-205	5 (August 1990).	wth factor-beta superfamily," J			
					n, an extracellular matrix-asso aphy," <i>Proc. Natl. Acad. Sci.</i> 8			
					defects in the dog," Unfallchiru		Х	
		Schwa 695 (19		, "Dog bone less osteoge	enetic than rat bone," Acta. O	rthop. Scan. 60(6): 693-		
		Schwa	rz et al.		alcified cancellous bone block nop. Trauma Surg. 111:47-50			
EXAMI	NER	SIGNATUR			DATE CONSIDERED			
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*Examiner Initials	Cite No.					al; symposium, catalog, etc.), date, pa her, city and/or country where publish		YES	NO
			function	n," Natu	re, 424:391-397 (July 20	itrol vascular morphogenesis l 203).			
			Smith, Michael et al. "March's Advanced Organic Chemistry", 5 <sup>th</sup> edition, John Wiley and Sons, New York, NY (March 2001).						
			Steadm	nan et a		al Technique and Rehabilitati	on to Treat Chondral		
			Steiner	, D.F., "	The proprotein converta	ises," Curr. Opinion Chem. Bio	ol. 2: 31-39 (1998).		
		Temenoff et al., "Effect of poly(ethylene glycol) molecular weight on tensile and swelling							
		properties of oligo(poly(ethylene glycol) fumarat OPF Hydrogel Material Properties, John Wiley &				nn Wiley & Sons, Inc., pp. 429	-437 (2001).		
		Terashima et al., Chondrogenesis in Outgrowths of Muscle Tissue onto Modified Bone Matrix in Tissue Culture", Clinical Orthopaedics and Related Research, 127: 248-256 (September							
		_	1977).		•				
						el for Investigating Endosseou s, Porous-Surfaced Implants F			
			Extracti	ion Soc	ket," The Journal of Ora	l and Maxillofacial Implants, 2	(2): 217-223 (1987).		
			Toriumi 1990).	i et al. "	Demineralized Bone," A	rch Otolaryngol Head Neck S	urg. 116: 676-680 (June		
			Urist. "	The Bo	ne Induction Principle,"	Clin. Ortho. Rel. Res., 55: 24	3-283 (1967).		
					one morphogenesis in In 3511-5 (December 197	nplants of Insoluble Bone Gela 3).	atin," Proc. Natl. Acad.		
			Urist et Arch St	al., "A urg. Vol	Chemosterilized Antiger . 110: 416-428 (April 19	n-Extracted Autodigested Alloi 75).			
			Urist et	al., "Ca	artilage Tissue Differenti	ation from Mesenchymal Cells	Derived from Mature		
	<u> </u>	4			ue Culture", <i>In Vitro</i> , 14(	8): 697-706 (1978). usion with the Aid of Chemost	erilized Autolyzed		
				n-Extrac		one," Clin. Ortho. and Related			
-					uman Bone Morphogene	etic Protein (hBMP)," Proc. Sc	oc. Exp. Biol. 173:194-199		
			Urist et			e morphogenetic protein by hy	droxyapatite		
		┪	Van de	n Ouwe		uctural homology between the			
FΧΔΜΙ	L NFR	SIC	and the		sin-like protease encode	d by yeast KEX2," Nucl. Acid	res. 18(3): 004 (1990).	L	
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			Wang et al., "Purification and characterization of other distinct bone-inducing factors," <i>Proc. Nat. Acad. Sci.</i> 85:9484-9488 (1988).							
					e morphogenetic protein indu	ces bone formation,"				
		Proc. N	at. Aca	d. Sci. 87:2220-2224 (19	990).					
				Effective terminal steriliza , 123: 504-515 (2006).	ation using supercritical carbo	n dioxide," Journal of				
					of Biomaterials and Bioengine	ering Part B", Applications				
		New Yo	ork: Ma	rcel Decker (1995).	-	_				
		Young	et al. "N	Morphological changes o	f autoclaved autogenic bone i	mplantation and				
autoclaved autogenic bone supplemented with allogenic demineralized bone mat parietal bone," <i>Histol Histopathol</i> . 11: 361-369 (1996).						ed bone matrix in rat				
		panetai	טטוופ,	тный глыйрайны. Тт. з	1990).		I			
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